Life & Death In The High Arctic

by J. Arthur Lewis

A Collection of True Experiences on the

DISTANT EARLY WARNING LINE

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and
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Preface

What you are about to read is not a work of fiction. It is a factual narrative of events in the life of the writer while employed as a dispatcher in the Arctic during the biggest airlift in Canadian history. I have tried to tell this story "the way it was", from my personal memories of the events. In a few instances names have been omitted from some episodes in order to avoid embarrassing the individuals concerned. For the most part pictures which complement the events were taken by the author.

This whole drama began for me in 1951, when I joined Maritime Central Airways in the position of cargo supervisor. At that time Maritime Central operated a few schedules mostly in the Maritime Provinces plus an expanding charter and cargo operation to Pine Tree radar sites on Canada's East Coast.

For a few years this operation continued about as serenely as could be expected in this phase of the aircraft business at that time. In 1954 all traces of serenity were wiped out when the company was awarded the contract to provide the airlift for the construction of the Distant Early Warning Line in the eastern Arctic. At this point all hell broke loose, as the company was required to expand the scope of its operations by ten fold almost over night. Suddenly airports mothballed since the pilot training days of World War 2 were brought to life as cargo terminals for the huge project.

My first introduction to D.E.W. Line duty was when I was suddenly transferred to the chaos of the resurrected airport at Mont Joli in Quebec. After a brief stint at Mont Joli I received an urgent call from head office to make haste to a new assignment at North Bay, Ontario. Make haste in this context means you should have been there yesterday. After a relatively peaceful two months at North Bay, I received the urgent message that led to my six years in the Arctic. "Report to Frobisher as soon as possible." Two days later at 4 o'clock in the morning I landed in Frobisher Bay to a lifestyle which I will try to share with my readers. A lifestyle which included postings at every main station on the D.E.W. Line and the challenge of dealing with a bureaucracy that one must experience in order to believe. This narrative does not include all of the tragic events that occurred, but only those of which I had direct knowledge.

Early Line History

During the Second World War, Canada built their first air defense radar stations at a few strategic locations on the east and west coasts. However, after the defeat of Germany and Japan, the necessity of maintaining those sites no longer existed and the stations were phased out.

In the subsequent years, with the increasing threat of the cold war, both Canada and the United States played with the idea of a radar defense capability to protect both countries from an attack from the north.

By 1949, it became generally known that the U.S.S.R. was building a long-range bomber force. As a result, both the Canadian and U.S. Defense Departments began to seriously discuss the possibilities of jointly building a radar defense line in Canada. Finally, an agreement was reached to construct the Pine Tree Line, a network of 33 stations extending from Vancouver on the west to Labrador on the east. This was supplemented by a Mid-Canada Line of 98 stations, which was completed in 1954. By late 1954, it became evident that Russian offense capability was outstripping the defense technology of those lines. As a result, by late 1954, the U.S. and Canada agreed to the construction of the big one, the D.E.W. Line, to consist of 22 stations entirely north of the Arctic Circle and extending from Alaska to the east coast of Baffin Island.

When the U.S. Government first proposed a radar Distant Early Warning (D.E.W.) Line in the Canadian Arctic, Canada, who also had fears of a Russian attack from the north, readily agreed to the idea, subject to the condition that Canadian Airlines should supply the aircraft and crews to deliver the workers and material to build this huge project. The U.S. would provide the financing.

At the start of the construction period, Maritime Central Airways, based in Moncton, NB, was given the contract of supplying aircraft crews and their management for the eastern Arctic. This contract was probably influenced by the fact that Maritime Central had just completed a similar though smaller project, the Pine Tree Line, on the Canadian East Coast. As the so-called cold war was at its height, there was a great sense of urgency to build this project as quickly as possible.

When the necessary contracts had been signed, the race was on to recruit the aircrews and all the back-up personnel necessary to build this massive construction job. It included working virtually around the clock and was scattered over thousands of miles of the most difficult terrain in the world and required the employment of 25,000 people.

As a result of World War II, which had ended in 1945, there were hundreds of experienced pilots looking for a job, all nationalities, all shapes, all sizes, and all degrees of competence. Some had many hours flying the Berlin Airlift and some had been flying anything with wings, anywhere in the world. They represented some of the best pilots in the world and a few of the worst. The group of pilots assembled for this huge project was paralleled by the aircraft necessary to carry out this immense program.

The prime contractor plus numerous sub contractors hastily assembled a fleet of cargo aircraft consisting of mostly World War II surplus craft such as Douglas DC3, DC4, and Curtiss C46. They were all gathered at a few strategic airfields in southern Canada. In a very short time the biggest airlift in Canadian history was in progress.

Probably one of the least understood features of the Arctic is the difference between what has been written about this vast part of Canada and the way it really is. I have read a number of books and short articles about the frozen north that left me with the old fable of the blind men and the elephant echoing in my mind. With apologies to the original writer, here is the wise old story. A group of blind men were curious about elephants. A kind gentleman agreed to take them to the zoo and give them a first hand encounter with an elephant. On arrival, he pointed each blind man at the elephant and told them to do a hands-on conclusion as to the appearance of the animal. The first man stumbled into the elephant broadside and exclaimed, "Why an elephant is like a wall." The next man bumped into the elephant's sturdy leg and shouted, "An elephant is exactly like a tree." Number three chanced to grasp the swinging tail and immediately declared, "An elephant is like a rope." The punch line is - all were partly right but all were also wrong.

A pertinent example is a book written by an individual who travelled and explored extensively in the North who stated that there were no glaciers in the Canadian Arctic. What he should have said is that he did not see any glaciers.

An example of the diversity of the Arctic terrain can be seen in the towering mountains, ice caps, and glaciers of the coast of Baffin Island and the flat desert one encounters in the Hall Lake area where, for many miles in any direction, ground level is never more than 20 feet above sea level and where the annual precipitation is similar to the Sahara Desert. Each of those extremes was my workplace for many months. The striking extremes in the north also include the temperature. In midwinter, the temperature can hover around -50 Fahrenheit for days on end. It can rise by 100 degrees by mid-June when the sun saunters around the horizon 24 hours a day. This produces a burst of vegetation and bloom in places where virtually no soil can be found. It would appear that the vegetation of the North can find places to survive where no soil appears to exist.

Frobisher Bay

Environmentally, Frobisher Bay, or Iqaluit as it is now called, has one distinct difference from D.E.W. Line sites. While all Canadian sites are located north of the Arctic Circle, Frobisher Bay is a few degrees south of that latitude. As a result, in midsummer the sun briefly dips below the horizon at night and in mid winter, rises for a few minutes at noon.

While Frobisher is not itself a D.E.W. Line site, in the early days of construction it was a very important and busy distribution center. A unique and little publicized feature of Frobisher Bay is the extreme tides that occur in the bay. The Jordan River has falls, which could be compared, to the famous Reversing Falls in the Saint John River in New Brunswick. However, in Saint John the falls could better be described as reversing rapids. The reversing falls in the Jordan River go from falls with a vertical drop of approximately eighteen feet (I didn't measure them, I merely accepted local figures and my own visual estimate.) at low tide to turbulent in flow completely obscuring the falls at high tide. This river also provides, at least in my experience, the best Arctic char fishing in the Arctic. My fishing efforts at other locations had produced only the dubious satisfaction of seeing the fish. At Frobisher I had the thrill of actually catching and later eating a few of the choicest fish in the world. However, in order to obtain your share of Arctic char at Frobisher, you must be prepared to surmount some difficulties in order to reach the best fishing spots on this river. You must, on foot, traverse an assortment of swamp, rocks and gravel and finally clamber down a steep river bank where one slip and you will experience the coldest bath you have ever encountered. Now add to all this the greatest misery of all, mosquitoes. This location is home to the most vicious, bloodthirsty and numerous mosquitos I have ever encountered.

During a few short days in midsummer the Frobisher area produces an assortment of colorful vegetation that brightens the drab landscape until snow and frost terminate their extremely brief season.

Arctic Cotton at Frobisher Bay

The author with Arctic char caught at Frobisher

RCMP Detachment at Frobisher Arrival

Arrival

When a native of the part of Canada generally acknowledged to be favored with reasonably pleasant climate decides to accept employment in an area north of the Arctic Circle, the obvious question is "Why?" To this question there are a number of answers. Firstly, if one accepts employment with an airline such as Maritime Central Airways, you go where your services are required. Secondly is the money. The wages and bonus for D.E.W. Line duty were approximately double that received for the same job as in the South.

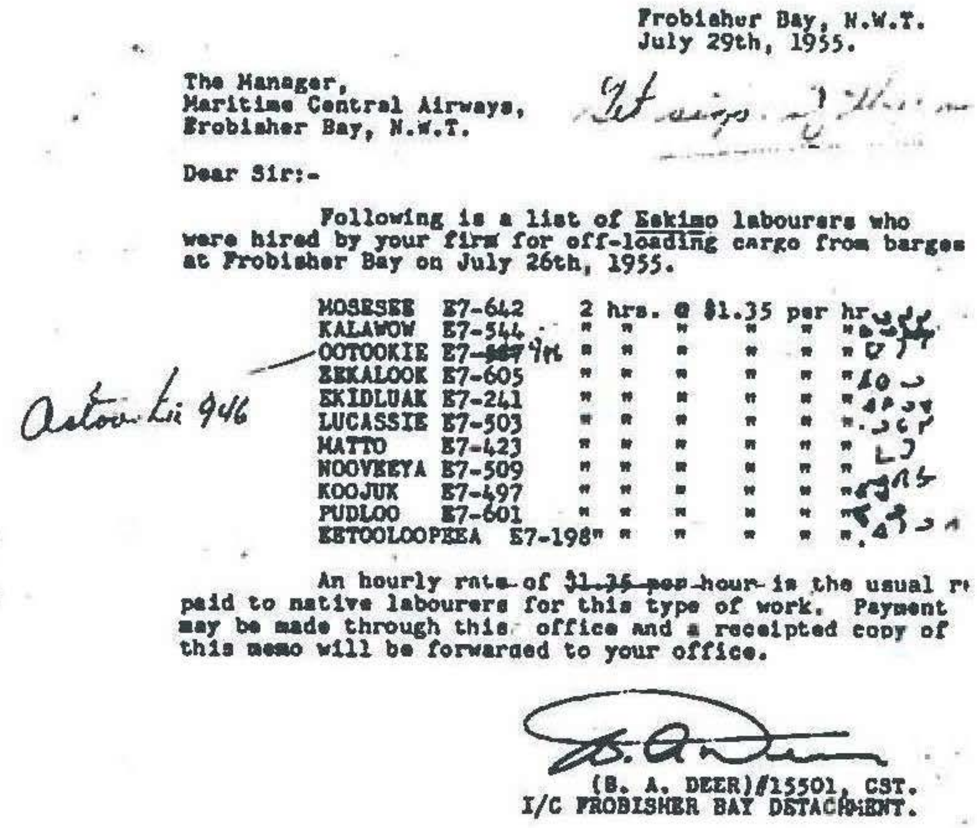
Probably the next most popular question was "What was your reaction on arrival at your first posting in the Arctic?" The answer to this requires a choice selection of adjectives including shock, disbelief, apprehension, etc.

Previous to the arrival of the horde of D.E.W. Line workers, Frobisher had been virtually a mothballed base built and manned during the Second World War. Now it was suddenly a hive of activity, as the main distribution base for the eastern section of the D.E.W. Line building project. A few of the groups vying for a niche in this sudden city were the U.S. Air force, the Canadian Army, construction engineers and laborers, airline crews and mechanics plus the many individuals necessary to feed and house this horde. All this activity was supposed to take place without the Russians becoming aware of it.

To be thrust into the bedlam that existed in Frobisher at the time of my arrival left no time to observe or even think about anything beyond work. We were assigned an office approximately twelve feet square and an adjoining room scarcely half that size which, in our start up days, became our living quarters. Dispatch personnel consisted of myself and one other dispatcher. Our work schedule was twelve hours on and twelve hours off. The number of dispatchers, which would normally be expected to carry the workload involved, would be a minimum of four. With a stream of loaded aircraft arriving from the south on a round the clock basis, unloading, and heading south for another load with another flight crew, it was virtually impossible for our skimpy office staff to keep abreast of the work involved. Luckily this operation was punctuated with the occasional day of bad weather giving us the chance to catch up on sleep, meals, and work. Over a period of weeks our situation gradually improved as head office sent us additional staff. This permitted us to finally adopt a reasonably normal lifestyle. We even reached the point where I was able to sample Frobisher's best outdoor sport, fishing.

One area of my duties permitted contact with the natives. As an airline employee, I was required from time to time to hire Eskimos to load and unload cargo. This transaction, however, also had its rules. All payroll and hiring had to be done by the R.C.M.P. and only they could negotiate the pay scale.

As a result of my work related contact with the natives, I discovered them to be honest and industrious and very quick to becoming skillful in the operation of tools and equipment. Considering their rather primitive lifestyle, I was surprised with the expertise in which a local youth could handle a bulldozer or forklift after very limited instruction.



Frobisher Bay, N.W.T.
July 29th, 1955.

The Manager,
Maritime Central Airways,
Frobisher Bay, N.W.T.

[illegible]

Dear Sir:-

Following is a list of Eskimo labourers who were hired by your firm for off-loading cargo from barges at Frobisher Bay on July 26th, 1955.

MOSESEE	E7-642	2	hrs.	@	$1.35	per	hr
KALAWOW	E7-544	"	"	"	"	"	"
OOTOOKIE	E7-~~[illegible]~~ 946	"	"	"	"	"	"
EEKALOOK	E7-605	"	"	"	"	"	"
EKIDLUAK	E7-241	"	"	"	"	"	"
LUCASSIE	E7-503	"	"	"	"	"	"
MATTO	E7-423	"	"	"	"	"	"
NOOVEEYA	E7-509	"	"	"	"	"	"
KOOJUK	E7-497	"	"	"	"	"	"
PUDLOO	E7-601	"	"	"	"	"	"
EETOOLOOPEEA	E7-198	"	"	"	"	"	"

Aatoo-kii 946

An hourly ~~rate~~ of ~~$1.35 per hour~~ is the usual r paid to native labourers for this type of work. Payment may be made through this office and a receipted copy of this memo will be forwarded to your office.

(B. A. DEER)#15501, CST.
I/C FROBISHER BAY DETACHMENT.

Eskimo employee payroll record

A Few Slight Mistakes

It is an almost universally acknowledged fact that sooner or later everybody will make a mistake. Mistakes come in all sizes. Some are individual blunders, some require a joint effort. The following are a few examples of both. At Frobisher, we were notified of the arrival of a DC4 from the South. Their manifest indicated they were carrying a full load that consisted of cases of toilet paper all consigned to one of the lesser sites. It also added that this was a part shipment and the balance would follow immediately. As this amount of toilet paper would have involved five DC3 flights to the site in question, we discretely brought it to the attention of the appropriate supply people that, according to our calculations, this amount of toilet paper would have filled the needs of the people at this site for approximately twenty years. This problem was quietly resolved by storing the whole shipment in a warehouse. Over time, it was sent out to all the sites on the line as their need arose. We eventually received the explanation that the site in question had requested a certain number of rolls of toilet paper. The order clerk at the head office had read it as so many cases and so assured the whole D.E.W. Line of a generous supply of toilet paper for some time to come.

Blunder #2 also involved people in positions of responsibility getting their figures messed up. On this occasion, a DC4 arrived at Frobisher with approximately 20,000 lbs. of building material consigned to a northern site at which the landing strip was unsuitable for a DC4. This aircraft was therefore unloaded and the cargo set aside until smaller aircraft became available to carry it to its destination. This shipment would represent two loads for a C46 or four loads for a DC3.

A couple of days later, a C46 with a capacity of 10000 lbs. became available and was sent to the loading area to be loaded. Loading was soon completed. The crew were brought to the aircraft and promptly crawled into the cockpit and taxied onto the strip for takeoff. With three quarters of the runway gone came the realization that something was definitely wrong. Having attained takeoff speed, the aircraft still refused to become airborne. At this point however, they had passed the point of no return and must fly or end up in a river off the end of the runway. Using the only choice left to them, they pushed both their engines to maximum power and, what appeared like inches from the end of the runway dragged their aircraft into the air. After a struggle to get their craft airborne, the struggle now must begin to attain sufficient height to thread their way through the hills en route to their destination. For many miles they could not achieve sufficient height to climb out of the valley of their departure point. They had little choice but to proceed to their destination with the plus factor that they would burn off considerable weight in fuel en route. With a combination of skill and luck, the flight did arrive and land at the site.

The question now arises; who was responsible for this near tragedy? The answer is this. Number 1, the loading crew completely ignored the load limit of the aircraft. Number 2, the flight crew did not observe any of the rules regarding their obligation to check their manifest and their cargo.

The history of the D.E.W. Line, or Distant Early Warning Line as it was properly called, includes tales of fantastic feats of flying and equally fantastic flying errors. In the flying business this can lead to tragedies. The following case is a vivid example of what can result when the boys in the cockpit forget their homework.

At about three o'clock in the morning, I was on dispatch duty at Frobisher Airport when I received a message from the south that a DC4 flight was inbound with a full load for an east coast site. Their flight plan called for a landing at Frobisher to pick up enough fuel to take them to the designated site and return to their point of origin. It was early spring and daylight hours were still short, with no useful daylight until about 9:00 A.M.

The weather report and strip data at 3:00 A.M. showed visibility of about one half mile in fog, and a cloud ceiling of 2000 ft at their destination site. The runway at the site consisted of a strip of sea ice with the snow plowed off, and a string of lights running down one side of the cleared area.

The flight would have to fly 300 miles northeast from Frobisher over a desolate and totally uninhabited section of Baffin Island and the rugged mountains of the east coast. Depending on wind conditions, the expected flight time would be about one hour. When the flight arrived at Frobisher, I had already obtained the weather en route and at the destination site. I expressed the opinion that the flight should hold at Frobisher until their arrival at the site would be in daylight.

The Captain checked the site and weather information I had obtained. He said that he felt I was far too pessimistic in my judgement of the data, and said that he would carry on immediately.

The last leg of the flight called for crossing the range of mountains that form the eastern coast of Baffin Island. Immediately after clearing the mountains, the flight would drop down to approach level and double back to the landing strip located in a sheltered cove in the shadow of the mountains.

As they made their turn onto final approach, the crew was satisfied their mission was about to be successfully completed. Visibility was fair, and although it was not yet daylight, they had spotted the lights bordering the runway as they passed over it outbound, before turning on final approach. Confident that all was well, they now approached the runway - wheels down and locked, landing lights on, and lined up to the left of the single row of strip light just ahead. Now, seconds before touchdown, they suddenly realized the runway was on the right side of the strip lights, not the left as they had believed! The point where they were now committed to land was an area of deep drifted snow that offered no possibility of a safe landing.

Within seconds of the realization of their predicament, they were down. The nose wheel tore off immediately. The tail came up bringing the inboard engines down to the point where the propellers dug deep into the snow. The left engine was torn from its mountings, and the remaining engines and propellers were seriously damaged. Within seconds the wreck plowed to a halt in the deep snow. The crew suffered only slight injuries but was very very happy to be alive. The cargo on the flight was undamaged, and consisted of a full load - 20000 lbs. of dynamite! The result of a serious error.

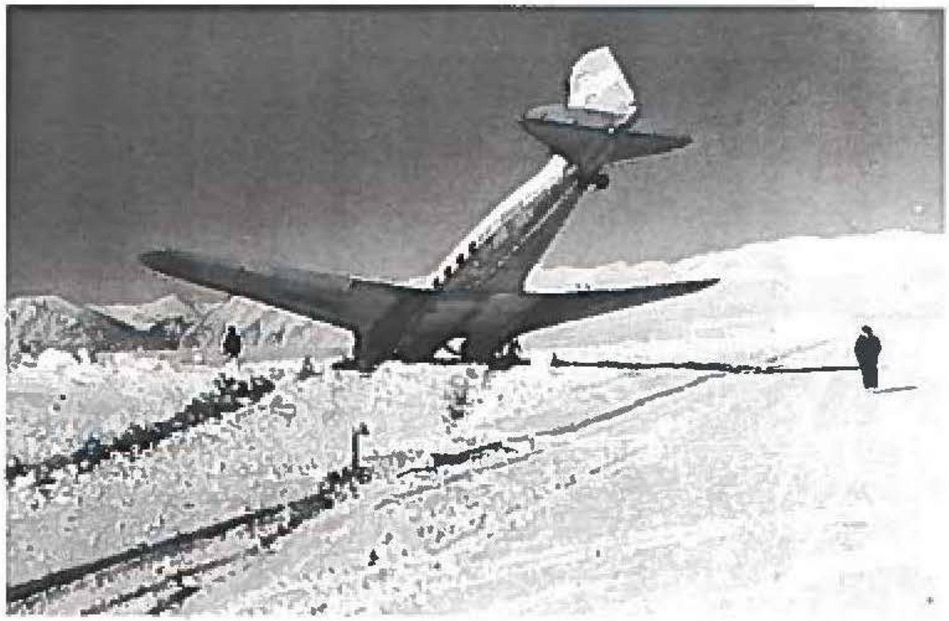
An Aircraft Too Keen to Fly

There are aircraft that are reluctant to fly and there are aircraft that are too eager to fly. This episode is about one aeroplane that apparently was determined to become airborne.

The incident took place at the Cape Dyer airstrip. This is definitely not an international class airstrip. It is too short for comfort, too narrow, and has a pronounced hump in the middle. The mechanical staff at Cape Dyer at this time consisted of an engineer and a mechanic, both experienced and competent men.

CF-IQR, a DC3, arrived at Cape Dyer and, after unloading, the captain requested that the engineer check out and adjust the brakes on his aircraft. The routine procedure of this operation was to adjust the brakes and then taxi the aircraft down the runway, checking the brakes en route.

The engineer's version of what happened goes like this. He adjusted the brakes to the best of his judgement. He then taxied onto the runway and proceeded down the strip at moderate speed, checking his brakes as he went. On reaching the end of the runway, he decided that he should do a test at a much higher speed. Accordingly, he now turned and started down the strip at a rapidly increasing speed. At the point at which he felt he was going fast enough for a test, he applied the brakes but was startled to find no braking effect whatsoever. After a very quick appraisal of the situation, he realized that his brakes did not have any effect because his wheels were not touching the ground. He was not taxiing; he was flying! With the end of the runway rapidly approaching, he hurriedly cut both engines and thumped back onto the runway. The engineer had now lost control and the plane promptly swerved off the runway, ending up tail high in the air with the nose and both engines buried in a snow bank. Damage was quite substantial.



The aircraft too keen to fly

A Slight Embarrassment

To illustrate that the D.E.W. Line aircrews are not the only ones capable of huge mistakes, here is one that occurred during the latter stages of the construction of the MidCanada Line.

A distribution base was located at Ross Bay in the province of Quebec. The personnel consisted of about a dozen airline employees plus loaders and a cook. Early one morning we received a message from head office to the effect that a high government official was en route to inspect our station. We must send an aircraft to Mont Joli; have the captain meet him at the train from Montreal, bring him to Ross Bay, and, as he was a V.I.P., treat him accordingly. Our DC3 was immediately prepared for the trip by removing the trappings of a freighter, installing a passenger seat, and doing a quick housecleaning. On arrival at Mont Joli, the pilot left the co-pilot to arrange for a quick return, then picked up a taxi and headed for the railway station. When the train pulled in, the pilot was dutifully awaiting the arrival of his passenger.

The first person off the train was a very dignified looking gentleman who our pilot concluded must certainly be his man. He therefore approached the obvious V.I.P. with the greeting, "Good morning, sir, are you the gentleman for Ross Bay?" to which he received the reply, "Yes I am."

En route to the airport the passenger appeared to be a man of few words and no chitchat occurred. With all arrangements having been completed for a prompt departure, they were soon on the way to Ross Bay.

After an uneventful two-hour flight, the passenger stepped off the plane and produced the shocking information that he was not the expected V.I.P. but was indeed the new camp cook. After the individuals involved recovered from their shock, the cook told his story.

He had been instructed by his agency to take the train from Montreal to Mont Joli. On arrival there he was to report to the M.C.A. office to await the first available flight to Ross Bay to replace a cook who had quit. He admitted that he was a bit surprised by his reception at Mont Joli but assumed that there must be an urgent need for his services at Ross Bay.

The pilot explained that the dapper appearance of the passenger appeared more fitted to the expected V.I.P. than to a camp cook. After a few hasty exchanges of messages with head office, the aircraft was on its way again to retrieve an irate V.I.P.

Cape Dyer

In order to arrive at an understanding of the diversity of the Canadian Arctic, we will take a separate look at five widely spaced areas. Most were my home away from home for many months.

The site at Cape Dyer was no doubt the most spectacular location to which I was posted. Cape Dyer is tucked among the mountains on the east coast of Baffin Island. Its climate was influenced by the neighbouring 8000-foot Penny ice cap on one side, and the source of hundreds of icebergs, Davis Strait, on the other side. Cape Dyer can produce the most violent winter storms in the Arctic. With winds of 100 miles per hour and over, this is not the place to go for a stroll during a snowstorm. To further enhance the winter weather, Cape Dyer has the highest snowfall I have experienced in the north.

A weather related incident occurred during my stay at this site that illustrates a Cape Dyer breeze. We had a full time weather station, located at the airstrip, at this site. During a typical winter storm, I was keeping the weatherman company. The roar of the wind made conversation difficult so we entertained ourselves by watching the wind gauge perform. Over the afternoon, the storm had increased to the point where the gauge was reaching 100 miles per hour plus. Suddenly, the noise of the wind intensified, the gauge reached 120 miles per hour, and instantly dropped back to zero. When the storm finally subsided, we discovered that the entire element of the wind gauge on the roof was gone. Needless to say, during this experience, we both had a few extremely nervous moments. Especially since we both knew that quite recently, during a similar storm, a building used by the construction crews had simply become airborne. It disappeared over the horizon in the general direction of Greenland.

During the brief summer, Cape Dyer can provide some relatively pleasant weather for exploring and hiking. However, due to the extremely rocky nature of the terrain, vegetation is scarce. As a result, wildlife is not as evident as at most other sites. As vegetation is the basic item in the Arctic food chain, wildlife abundance is largely governed by its prevalence. The most visible animal life in the vicinity of our location was the raven. The ravens did not seem to mind the extremes of weather. Seals appeared to be quite numerous in the nearby fiord. This would account for the presence of the king of the Arctic, the polar bear.

My only actual sighting of this animal was extremely brief. It was a reasonably balmy summer day. This enticed me to go for a walk on the best stretch of road on the base, the road to the local garbage dump. This road wound its way for about a mile between hills and valleys to its dead end at the dump. A critical fact in this adventure was that the dump itself was only visible from the road after an abrupt turn in the road as it rounded a hill on its last hundred yards. As I made this turn in the road and reached the point where I was virtually on top of the dump, I froze in my tracks. Within a short stone's throw, there was a very large, dirty, polar bear. My first reaction was to turn and run like hell. My second reaction was not to do that, as any sudden motion could easily take his attention from the meal that he seemed to be enjoying. It quickly occurred to me that I very well might seem to him to be an excellent dessert to top off the entree that he was now consuming. After this careful consideration, which must have taken at least one second, I, very carefully and quietly, turned and retraced my steps. During my years in the Arctic, this was my first and only encounter with an animal where I was convinced that my best move was a retreat. Cape Dyer does not sustain sufficient wildlife to make local exploration interesting. Other fascinating areas of research are there in abundance. As a very amateur prospector, I soon discovered that this location provided a wide variety of minerals. The minerals probably were not in commercial quantity but were in remarkable variety.

Our airfield was located on a narrow plateau about 2000 feet above the nearby fiord and about 3000 feet lower than the radar site that was the sole reason for its existence. The higher portions of this terrain consisted of largely solid rock while the plateau areas were gravel with boulders up to the size of a small house. This material did not seem to bear any resemblance to the solid rock of the adjacent mountains. It appeared to have been deposited here at some ancient time by glacial action. On one of my early forays over this area, I discovered an area about a city block in size composed of those assorted rocks and boulders. On close examination, I realized they contained fragments of a deep red mineral. By collecting a few samples of this find and making some discreet inquiries, I discovered that I had stumbled on a garnet mine. I later discovered that there were widely scattered occurrences of this mineral in the adjacent areas. On further jaunts of discovery, I located a few outcrops of mica and a number of black rocks of assorted sizes. They seemed to me to be heavy for their size so I collected a few small samples. Later, on testing them with a compass, I discovered that they were distinctly magnetic. They were the iron bearing ore magnetite.

During my first winter at Cape Dyer, we had two attractions for sight seeing. One was permanent and one was temporary. The permanent item was an ice cave; the temporary item was an iceberg.

Our iceberg had drifted into the nearby fiord in the early fall and soon became frozen in until the following summer. Almost everyone has seen pictures of icebergs but the opportunity to drive up to an iceberg in a snowmobile and get a close up view of one of those massive products of a glacier is a once in a lifetime event. This particular iceberg was approximately the height of a six-story building above water level and about 150 feet in diameter. When one realizes that about 90 percent of an iceberg is beneath the water, it becomes evident that the depth of water necessary to float this monster in a virtually land locked fiord must be substantial. The following summer, our iceberg headed out to sea and resumed its journey south.

Our #2 attraction was the ice cave. It could better be described as an ice tunnel that occurred where a glacier flowing down from the mountains crossed a river fed by the melted water from other higher land. The river involved was only a river during the warmest part of the summer. At that time, it was a torrent approximately 60 feet wide. In winter, the river became a frozen ravine. The roof of this tunnel is close to fifty feet above the rocky floor and displays annular rings indicating the very slow movement of the glacier each year. To visualize the size of the opening in this tunnel for its entire length, it is safe to say that it could easily permit the passage of an average sized house.

Ice cave at Cape Dyer

Iceberg frozen in at Cape Dyer

Aircraft

By today's standards, the aircraft that moved the huge amount of construction material from the assembly points in southern Canada to the D.E.W. Line sites were primitive indeed. The aircraft that should receive the most credit in the early stages of construction is the Douglas DC3. Capable of operating on either wheels or skis, it delivered loads to northern airstrips where few other aircraft could operate. An indication of the durability of this aeroplane is the fact that forty years after the last one left the assembly line many are still in service all around the world.

The next most useful aircraft, which was mostly used on the long haul from the south, was the Douglas DC4. It could normally carry four times the cargo of the DC3. Other aircraft pressed into service were the Bristol Freighter and the York Freighter. The latter was a modified version of the British Lancaster Bomber. This aircraft developed a number of mechanical problems and few of them survived the project. The Bristol Freighter was a new concept in its class. It had a unique ability to carry large vehicles, as the entire front opened up, making it possible to drive directly into its cargo bay. Its other unique feature was its appearance, instead of the conventional round aircraft fuselage, it could best be described as square. It had the appearance of a barn with wings. I have actually heard a spectator, seeing it for the first time, ask the crew if they had made it themselves. In spite of being the ugly duckling in the fleet, this aircraft performed a very important mission. It was particularly important in the early stages of construction.

As has been previously noted the Bristol aircraft proved to be extremely useful due to its unique configuration. Unfortunately, this aircraft and its crew met an untimely end on a flight out of Hall Beach. The Bristol was scheduled to load an army type truck at Hall Beach for delivery to an Eastern site. The vehicle was loaded and secured to the satisfaction of the crew and engineer. This aircraft, incidentally, carried its own engineer. Immediately after takeoff, the tower received the startling message that the flight would be returning to the strip. On the surge of takeoff, the tie downs securing the cargo had broken and the truck had shifted to the rear of the cargo bay. With the aircraft now in an extremely tail heavy attitude, the crew was faced with a dire situation. They must maintain high speed and power to compensate for their unstable load. At the same time, they must come around for a landing that normally called for reduced speed and power. At this stage in the flight, all ground personnel were anxiously watching and listening to the progress of the plane, which was clearly visible during the entire flight. Minutes after the announcement of his plight, as the aircraft was seen to be coming around for a landing, those on the ground were horrified to hear the engine speed reduced and see the flaps come down in preparation for a normal landing. Almost instantaneously, the aircraft went into a spin and plummeted to the ground. Apparently, in the few seconds he had to decide, the pilot had chosen to attempt a normal landing. The alternative had been a power on, high-speed landing.

Airline employees on the D.E.W. Line were all too familiar with sudden tragedy. However, the shock of being a witness to a crash that took the lives of three of their team cast a gloom over Hall Beach for many days to come.

The Saga Of Whitey Dahl

Of all the pilots who answered the call to the D.E.W. Line Airlift, there is little doubt that the most notorious of them was a soldier of fortune by the name of Whitey Dahl.

Whitey's flying career began in 1931 when he enlisted in the U.S. Air force in Texas. In 1934 he was flying the U.S. Mail, which ended in 1936 when he tangled with the law and was invited out of the service. He next surfaced as a fighter pilot for the Spanish Republican Government in their civil war against the Nationalist Forces of General Franco.

During this engagement Whitey was shot down twice, the last time inside enemy territory. He was captured and in a military trial sentenced to death by firing squad. His sentence received wide newspaper coverage and resulted in numerous appeals to General Franco for his pardon and release. The most publicized appeal was from his wife, a prominent entertainer in the United States. This effort produced results and he was released on condition that he leave Spain and no longer participate in the war.

Whitey next surfaced in Canada when he enlisted in the RCAF as an instructor with the British Commonwealth Air Training Plan. He soon established a reputation as an outstanding pilot and instructor. He also eventually confirmed the fact that he was a loner and a rebel, which resulted in him again getting himself into trouble with the law and being kicked out of the RCAF.

For some years Whitey went back to a career as a pilot and soldier of fortune and disappeared from public view.

My first meeting with Whitey Dahl was a bit of a surprise. As a dispatcher at the main distributor point in the eastern segment of the D.E.W. Line, I thought I could pick out every category of pilot from the airline pilot, the bush pilot, the mercenary and all types between.

Having at various times read news items of Whitey Dahl I had formed a picture of a swashbuckling individual who would fit into the character of his exploits. A very different type of person walked into the dispatch office in Frobisher Bay and dropped on my desk the documents covering the flight he had just flown in from the south.

I glanced at the signature on the papers, looked up and did a double take. The pilot in front of me certainly did not fit the picture of the soldier of fortune I had anticipated. This Whitey Dahl was an individual of medium height, mild mannered, soft-spoken and almost drab in appearance.

In the next few weeks Whitey was a frequent visitor to Frobisher. He flew regular trips between Montreal, Frobisher Bay and various D.E.W. Line sites.

My next and last encounter with Whitey started with a call from the tower saying that a DC3, which had made no radio contact, had just landed and appeared to have trouble getting stopped. As a result it had overshot the paved portion of the runway and they could now see three individuals on foot heading for the dispatch office.

In a few minutes in walked Whitey and two companions. My first greeting was, "Whitey, where in hell did you get that DC3 and where are you going with it?"

Whitey's reply, as matter of fact as if it made sense, was that he had been approached by one of his companions, a chap named Pearson. He was a professional aircraft salvage artist who had obtained this plane from an insurance company as an abandoned wreck. He had come north from his home base in Florida to the D.E.W. Line site where the aircraft was located and, with the help of his mechanic, they had patched it up to the point where they believed it could be flown. Now they must find a pilot who would fly it south to an airport where it could be repaired to a degree where it could be licensed.

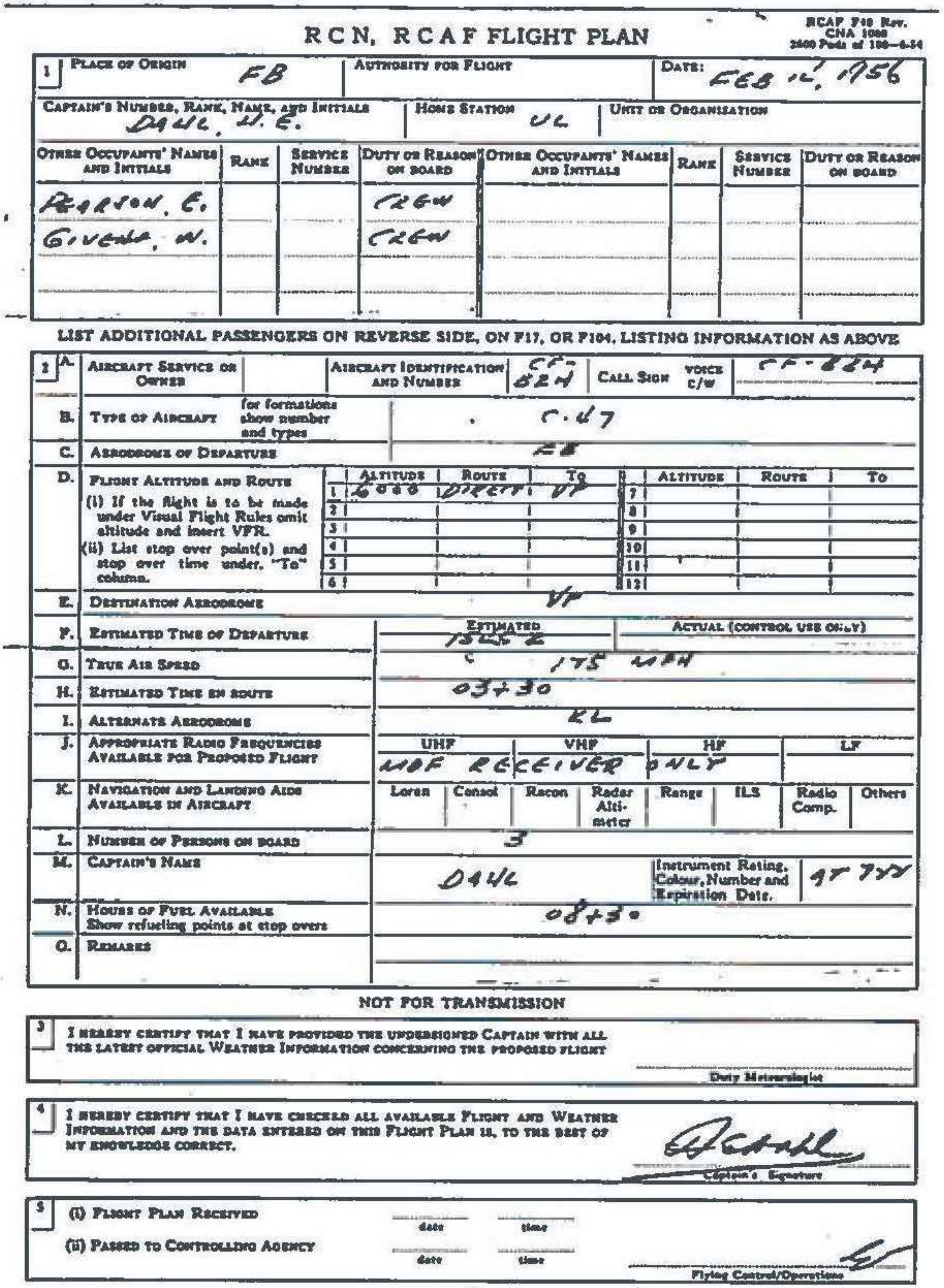
It apparently did not take too long with the variety of pilots flying on the D.E.W. Line to locate Whitey and strike a deal for him to fly their crippled craft south. Unfortunately for Whitey, he had some time on his hands as he had completed his legal flying time for the month.

I asked Whitey the obvious question, "What on earth would entice you to take on the chore of flying an illegal and unsafe aircraft on such a trip?" The reply I received was typically Whitey Dahl, "A thousand dollars is a thousand dollars, and I can use it." He added that they planned to spend a couple of days at Frobisher and do some further tinkering with their engines and hydraulic system to make it a bit more flyable.

For a couple of days Whitey and his pals were diligently working on their aircraft and avoiding airport officials. On the third day I suddenly received a call from the traffic controller in the tower. He apparently had been led to believe that Whitey's aircraft was an authorized D.E.W. Line flight, which was definitely not true. He stated that Whitey had phoned him and requested permission for a brief test flight during which he would remain within sight of the tower.

The controller readily granted this request, but was now greatly upset as Whitey had taken off and immediately headed south. Whitey had not filed a flight plan and, when last seen over Frobisher Bay, was heading due south and leaving a trail of blue smoke. A few minutes later when I sat down at my desk I was startled to discover a partly concealed document among my papers. It was Whitey's flight plan. Obviously I was supposed to find it after he was well on his way.

Some hours later word was received at Frobisher tower that the tangled wreckage of a DC3 had been spotted just short of Chimo Airstrip. Whitey's luck had finally run out and his spectacular career was now history.



RCAF F10 Rev.
CNA 1000
2600 Pads of 100—6-54

RCN, RCAF FLIGHT PLAN

1

PLACE OF ORIGIN FB	AUTHORITY FOR FLIGHT	DATE: FEB 12, 1956
CAPTAIN'S NUMBER, RANK, NAME, AND INITIALS DAHL, W. E.	HOME STATION UL	UNIT OR ORGANISATION

OTHER OCCUPANTS' NAMES AND INITIALS	RANK	SERVICE NUMBER	DUTY OR REASON ON BOARD	OTHER OCCUPANTS' NAMES AND INITIALS	RANK	SERVICE NUMBER	DUTY OR REASON ON BOARD
PEARSON, E.			CREW				
GIVENS, W.			CREW				

LIST ADDITIONAL PASSENGERS ON REVERSE SIDE, ON F17, OR F104, LISTING INFORMATION AS ABOVE

2

A. AIRCRAFT SERVICE OR OWNER — AIRCRAFT IDENTIFICATION AND NUMBER: CF-824 — CALL SIGN VOICE C/W: CF-824

B. TYPE OF AIRCRAFT for formations show number and types: C-47

C. AERODROME OF DEPARTURE: FB

D. FLIGHT ALTITUDE AND ROUTE

(i) If the flight is to be made under Visual Flight Rules omit altitude and insert VFR.
(ii) List stop over point(s) and stop over time under, "To" column.

	ALTITUDE	ROUTE	TO		ALTITUDE	ROUTE	TO
1	6000	DIRECT	VF	7			
2				8			
3				9			
4				10			
5				11			
6				12			

E. DESTINATION AERODROME: VF

F. ESTIMATED TIME OF DEPARTURE — ESTIMATED: 1525 Z — ACTUAL (CONTROL USE ONLY):

G. TRUE AIR SPEED: 175 MPH

H. ESTIMATED TIME EN ROUTE: 03+30

I. ALTERNATE AERODROME: RL

J. APPROPRIATE RADIO FREQUENCIES AVAILABLE FOR PROPOSED FLIGHT

UHF	VHF	HF	LF
MDF RE	CEIVER	ONLY	

K. NAVIGATION AND LANDING AIDS AVAILABLE IN AIRCRAFT

Loran	Consol	Racon	Radar Alti-meter	Range	ILS	Radio Comp.	Others

L. NUMBER OF PERSONS ON BOARD: 3

M. CAPTAIN'S NAME: DAHL — Instrument Rating, Colour, Number and Expiration Date: 9T 7??

N. HOURS OF FUEL AVAILABLE Show refueling points at stop overs: 08+30

O. REMARKS

NOT FOR TRANSMISSION

3 I HEREBY CERTIFY THAT I HAVE PROVIDED THE UNDERSIGNED CAPTAIN WITH ALL THE LATEST OFFICIAL WEATHER INFORMATION CONCERNING THE PROPOSED FLIGHT

Duty Meteorologist

4 I HEREBY CERTIFY THAT I HAVE CHECKED ALL AVAILABLE FLIGHT AND WEATHER INFORMATION AND THE DATA ENTERED ON THIS FLIGHT PLAN IS, TO THE BEST OF MY KNOWLEDGE CORRECT.

W Dahl
Captain's Signature

5 (i) FLIGHT PLAN RECEIVED ______ date ______ time

(ii) PASSED TO CONTROLLING AGENCY ______ date ______ time

Flying Control/Operations

Whitey Dahl's lat flight plan.

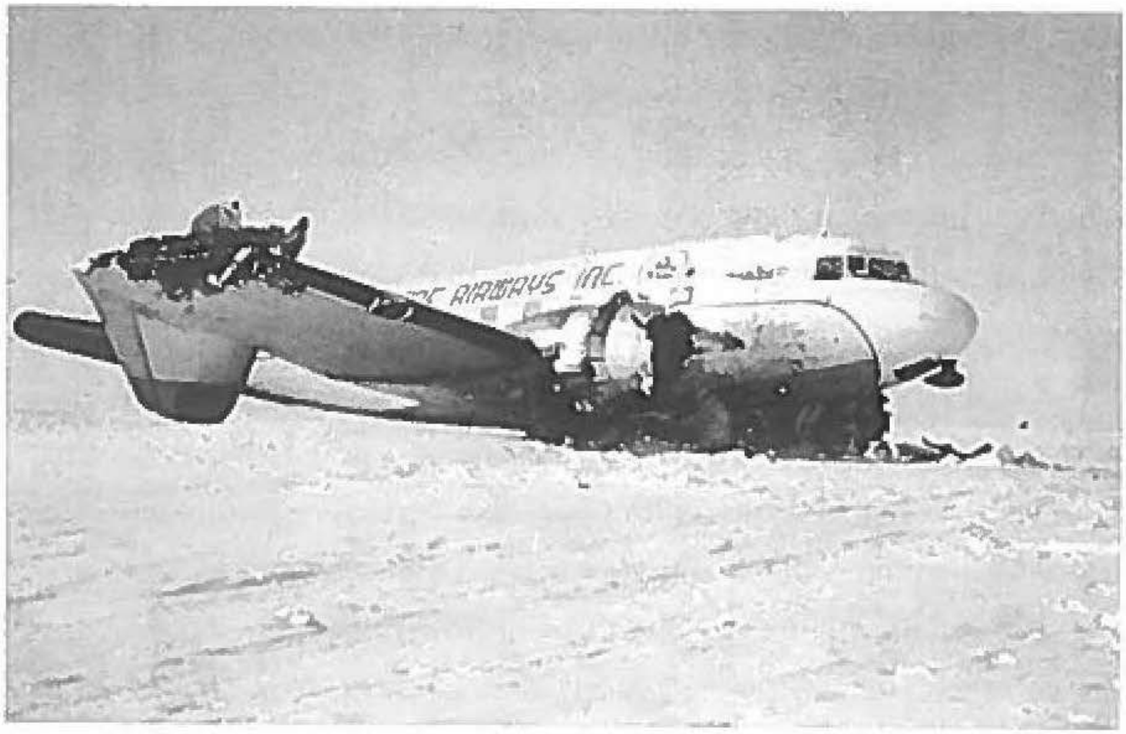
Hall Beach - Fox Main

Fox Main, currently known as Hall Beach, seemed to have more than its share of crashes during the construction period. Perhaps one of the most remarkable, as far as survivors were concerned, occurred on a winter night with weather conditions as near perfect as they get at that time of year. It was almost midnight with calm wind and clear skies when a DC3 inbound from a western site reported to fox tower that they were on final with the runway in sight. The ground crew were immediately notified to be prepared for the imminent arrival of their aircraft. Within a very few minutes it became apparent that something had gone wrong, as the flight had not landed and no further transmission had been received from them. Immediately, a search party was assembled to head out in the direction from which the flight would have approached runway. The search team was organized as quickly as possible. With the temperature hovering around -50 Fahrenheit, any survivors of a crash must have help soon or freeze to death in a very short time.

After having covered only a short distance beyond the end of the runway, the rescue group were amazed to meet five cold and exhausted individuals heading for the airstrip. After arriving back at the base and warming the crew and passengers the following story emerged.

After contacting the tower, the pilot, with the lights of the strip unfolding in front of him, lowered his wheels and flaps and prepared for touch down... and touch down he did. While the terrain in the Fox Main area is a level plain it is far from smooth, as it is composed of low gravel ridges. When the aircraft touched down on this inhospitable location the landing gear was instantly torn off. As the aircraft bounced from ridge to ridge, both wing tips were torn off and the plane was quickly reduced to a pile of junk. Miraculously while the crew and passengers received a shaking up which they won't soon forget all hands were able to walk away with only a few bruises. After much speculation as to the cause of this crash, it was generally agreed that a mirage had led the pilot to believe that he was almost above the end of the runway when he was, in fact, a considerable distance away. Under certain atmospheric conditions which are known to exist in both Arctic and southern areas the vision of distant objects or locations may be distorted so that near points may appear distant or at altered height. This phenomenon is frequent in southern deserts but I have personally observed its occurrence in a number of Arctic locations.

Further investigation of this crash revealed no mechanical failure or human error as the cause of this accident.



Hall Beach site with a landing too soon!

Hall Beach Site

With the conditions for flying that exist in the Arctic it is understandable that occasionally a pilot will run into weather changes that will test his skills to the limit. The incident that follows presents a combination of both weather and mechanical surprises that sound more like a bad dream than an actual occurrence.

It was an extremely cold day in January, with heavy overcast. A Flying Tiger DC4 Capt. announced that one of his engines had reached the point where it would have to go south for repair. He planned to fly to Montreal on three engines. This trip did not present any particular problem; this aircraft was quite capable of flying all day (with no load) on three engines.

By the time the crew had prepared for the flight, filed a flight plan, and taxied out for take off, a light snow was falling. It was not enough to suggest a delay was necessary.

Twenty minutes after take off, we received a call from the flight that another engine had quit and they were returning to Hall Beach. By this time a radical change in the weather had occurred. It was now snowing heavily and visibility was reduced to near zero.

To summarize the situation, we were at an airstrip with no facilities for instrument landing. A four-engine aircraft, flying on two engines, was about to try to land in very low visibility. Fortunately, the aircraft was manned with a highly experienced crew.

We on the ground decided to resort to an emergency procedure which we had previously used as a last ditch effort to guide an aircraft to a landing. This consisted of stationing someone in the middle of the runway at the approach end, armed with a handful of flares. His procedure was to wait until he could hear the aircraft on approach. He would then keep firing flares straight up until the aircraft had landed, hopefully missing him, or had aborted the landing and gone around to try again.

On this occasion, we had barely completed our preparations to assist the landing when the aircraft was heard overhead and briefly seen through the now heavy snow.

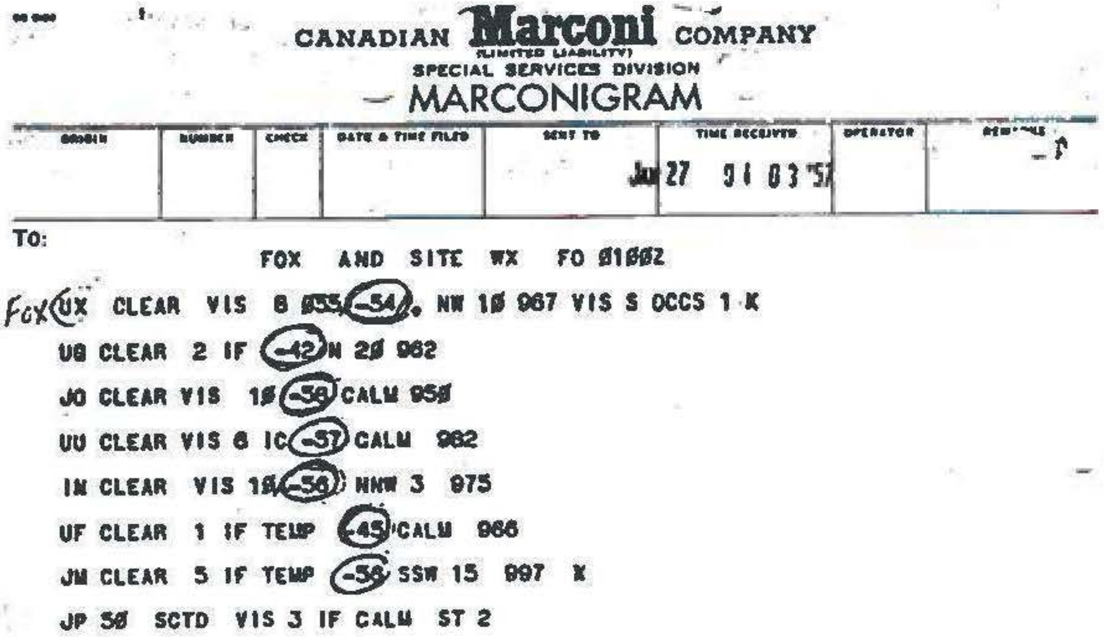
Before arriving overhead the pilot had been advised of the preparation for his arrival. He immediately realized that he was not lined up with the runway and must go around and try again. However the pilot advised that he had spotted our runway lights and the flares from the end of the runway. Minutes after this message the situation took a serious turn for the worse as the pilot broke in with the announcement that another engine had quit. He was now in the desperate predicament of trying to keep a four-engine aeroplane in the air on one engine.

The runway, which due to wind direction must now be used, required an approach from over the sea to a touch down point ten feet above sea level. The control tower was located approximately 100 yds. from the runway and directly abreast of our flare man. He was stationed in the centre of the runway, at this moment not the safest place in the world.

Everyone involved in this extremely tense situation knew that within the next few minutes we were going to see either a fantastic display of flying skill and a successful landing or a potentially fatal crash. The pilot was now faced with the horrendous task of doing a 180-degree turn over the sea and coming in again for a landing, all on one engine, which was being forced to develop a degree of power that it could only sustain for a matter of minutes.

In the control tower we strained our eyes and ears to detect the approach of the aircraft. Suddenly the flares started up from the runway, showing that the aircraft had been heard by the flare man. Within seconds, we in the tower spotted the screaming aircraft out of the murk.

He flashed by the tower in a steep bank to the right, one wing high in the air and the other wing barely missing the ground. Now in a position to line up with the runway, almost instantly he was on the ground with a perfect landing. We in the tower sighed in relief, as during this last manoeuvre the aircraft had missed the tower by what seemed like inches.



CANADIAN **Marconi** COMPANY
(LIMITED LIABILITY)
SPECIAL SERVICES DIVISION
MARCONIGRAM

ORIGIN	NUMBER	CHECK	DATE & TIME FILED	SENT TO	TIME RECEIVED	OPERATOR	REMARKS
					JAN 27 01 03 57		

To:

FOX AND SITE WX FO 01002

Fox UX CLEAR VIS 8 055 -54 . NW 10 967 VIS S OCCS 1 K
UG CLEAR 2 IF -42 N 20 962
JO CLEAR VIS 10 -58 CALM 950
UU CLEAR VIS 8 IC -57 CALM 962
IN CLEAR VIS 10 -56 NNW 3 975
UF CLEAR 1 IF TEMP -45 CALM 966
JM CLEAR 5 IF TEMP -58 SSW 15 997 X
JP 50 SCTD VIS 3 IF CALM ST 2

Copy of daily weather report for eight sites adjacent to Fox Main (Hall Beach).

Circled figures are temperatures farenheit.

The Saga of Red Bale

I first met Red Bale when he arrived at North Bay. He was flying a DC4 for one of the numerous charter airlines that had joined the D.E.W. Line fleet. His aircraft was soon scheduled for a trip north with a load of building material. The flight plan for the round trip called for a stop at Churchill for fuel, then direct to the D.E.W. Line site. The return trip included a stop for fuel at Coral Harbour, then direct to North Bay. Apparently, all went according to plan outbound. A stop for fuel at Churchill, favourable winds and weather, and a prompt turnaround at the site. On the southbound leg, when nearing Coral Harbour, Red made a serious mistake. He had heard that fuelling service at Coral was not the best. After a hurried calculation, he decided he could carry on to Churchill where he had found prompt and efficient fuelling. Halfway to Churchill, Red began to have second thoughts. He was encountering strong head winds and was using fuel at an alarming rate. Red now tried all the tricks in the book, trying a higher altitude and then a lower one. This produced no improvement in his progress. Finally, with two engines shut down, he struggled on. Soon, with the lights of Churchill in sight, he made the agonizing realization that he was not going to make it with two sputtering engines and the fuel gauges showing empty. He went into a glide down to the frozen surface of the Hudson Bay. Red was hoping for a smooth enough spot to land his crippled craft with as little damage as possible. There was an old saying among pilots that any landing was a good landing that you could walk away from. In that context, this was a good landing. The crew did walk away from it and the aircraft did fly again. It flew only after a very expensive salvage effort.

Some months later, I again crossed paths with Red. I was now stationed at Hall Beach with an improved airstrip. It had been upgraded to a distribution airport for many eastern sites. Red blew in one day flying a C46 for a different employer. His previous boss had apparently been annoyed by his episode at Churchill. Red now flew a couple of uneventful trips to a western site. He then took off with another load for the same destination. The first message we received from the site was that the plane had arrived overhead but the airstrip was fogged in. They had decided to circle in the vicinity in the belief that it would clear out shortly. For about an hour, the aircraft could be heard circling overhead. Suddenly, the sound changed and, with a thunderous roar, the plane appeared through the fog and crashed into the ground in the centre of the camp. No message indicating a problem had been received. Apparently, both crewmembers had fallen asleep and gravity had taken over. Red Bale had made his last mistake.

Red Bale's final resting place

When the crew fell asleep on the job

Native Carvings

The area of Canada in which the D.E.W. Line was to be built was, for thousands of years, home to widely scattered groups of a unique race, the Eskimos.

Probably the most remarkable feature of those people is their ability to survive in a land that offers none of the amenities usually associated with a good lifestyle. In almost all of the inhabited world, vegetation in one of its numerous forms provides food for its natives as well as material for housing and clothing. In the Eskimo homeland, such vegetation does not exist.

Even more austere is the climate of the land in which those people live. Except for a few brief weeks in summer, extremely cold and stormy weather is the rule. As a result of this environment, the livelihood of the Eskimo has depended on hunting and fishing for many centuries. In the last hundred years, however, there has been drastic change in the lifestyle of the Eskimo due to the encroachment of industry and government from the south.

A prime example of this change is the Canadian government's program of supplying housing and developing basic industries. In the area of industry, the Eskimos have for many years produced stone and ivory carvings, most of which they bartered to the Hudson Bay stores, which are located in areas of Eskimo settlements across the Arctic.

When construction of the D.E.W. Line began, the local Eskimos lost no time in seeking out customers among the new arrivals. On a number of occasions, I was contacted by natives bearing samples of their art, which, in spite of a language problem, they made it clear that they would exchange for cash. My most fruitful barter sessions for Eskimo art occurred at Hall Beach, where a group from Igloolik would arrive on a sales trip when they had accumulated a few saleable items.

Production and sale of Eskimo artifacts has been subject to a radical change since my purchases. The Canadian government, through their efforts to improve the lifestyle of the Eskimo, have undertaken the task of teaching the natives how to become more efficient in producing and selling their products. This program apparently started in the Cape Dorset area when government experts arrived on the scene bringing modern tools and design ideas. The newcomers also established a new marketing concept. The artifacts produced would now be sold through a government-approved channel and each item would carry a stamp of approval by that agency.

Some months after my last purchase I visited a retail establishment in Montreal that sold Eskimo art. On describing the items of my collection to the proprietor, he advised me that my items would not be recognized as authentic as they did not carry this stamp. On my return to the north, I checked with a number of natives and was told that many Eskimos had never heard of this marketing plan. I was eventually forced to conclude that the more remote areas of the Arctic had not yet been converted to the modern industrial age.

Arctic carvings purchased from the Natives

Hall Beach

One of the rules applied to all employees on the D.E.W. Line was "Thou shalt not wander away from camp" and "Do not fraternize with the natives". However, as there did not seem to be any form of enforcement of those regulations, I managed to explore some of the countryside at each location where I was stationed.

Hall Beach, as it is now called, has had a variety of names. In the early days of the D.E.W. Line construction, it was Site 30, then Fox, Hall Lake, Fox Main, etc. All this change was designed to confuse the Russians. In any event, we will go along with the latest name, Hall Beach.

This location has just one thing in common with all the other D.E.W. Line sites, the temperature. In summer, it is far from tropical, but relatively comfortable. In winter, it is extremely cold. The unique feature of the area is its flatness. As far as the eye can see the surface of the land is approximately 10 feet above high water. Even to the untrained eye, it is obvious how this land was formed. Under a certain combination of cold and wind, a huge ridge of ice built up at the shoreline. Then came a storm with a high tide and an inshore gale, driving this ice ridge ashore. In doing so, it bulldozed a layer of limestone shale from the bottom of the shallow seabed and deposited it on shore. This process has obviously been taking place for thousands of years, resulting in a vast expanse of totally flat landscape.

Immediately adjacent to the shoreline, vegetation is limited but as one moves inland the typical Arctic plant life becomes more and more evident. As this flat terrain produces many swampy areas, vegetation thrives to the point that Arctic nesting waterfowl spend their summer in the area, raising a family and flying south in the fall.

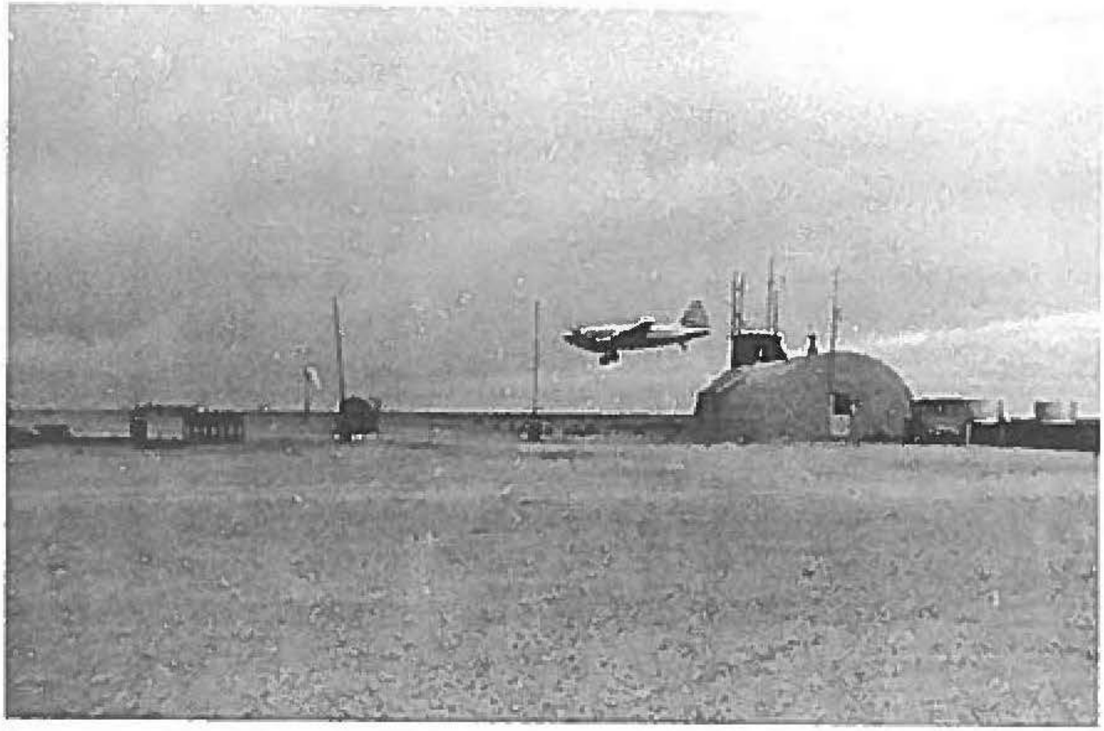
In the realm of animal life, the fox appears to be the most common. The animals appeared to avoid human habitation by day, but by night they arrived at our camp and put on a performance that seemed out of character with their shy nature.

In the early months of the construction stage of the D.E.W. Line, all personnel were housed in canvas tents. During the winter, those tents were frequently drifted in by snow so that only the roof appeared above the drift. When this condition existed, the foxes apparently enjoyed a game that consisted of clambering up one side of the roof and sliding sown the other side. This caper could continue for an hour after which they would disappear and let the occupants go back to sleep.

Over much of the Canadian Arctic, the white fox represents the biggest single source of income for the native Eskimo. In spite of the annual slaughter of these animals for their valuable fur, they have managed to survive and, occasionally, to become very plentiful due to the abundant supply of their staple diet, the lemming.

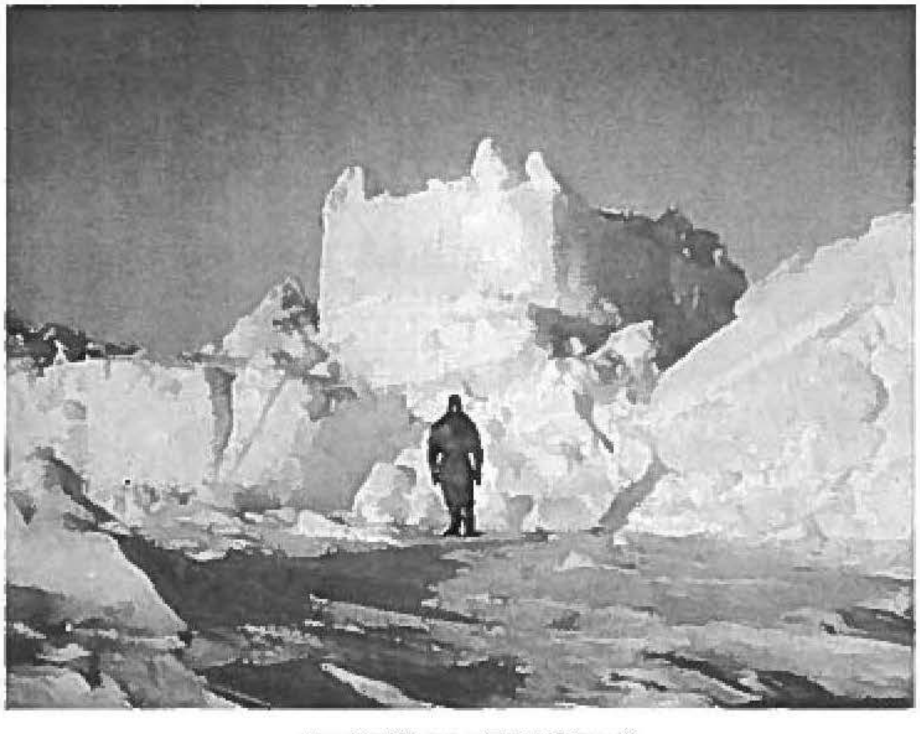
However, in the peculiar cycle of nature which controls the sometimes scarce little rodents, the fox often finds "the cupboard is bare" of their favorite dish and they must look elsewhere for some substitute, or die of starvation. A striking example of the ends to which a hungry fox will go was illustrated in a "Notice To Airmen" issued by the authorities in charge of the airstrip at Shepherd's Bay on November 18th. The following is a direct quotation from the notice. "Runway 25 lights out due to foxes eating wiring. Lights will be out until further notice."

As this gastronomic experiment on the part of the foxes took place during a period when the sun does not rise at all in this part of the world, Shepherd's Bay airstrip was virtually out of commission until new wiring could be installed and the foxes persuaded to seek their snacks elsewhere.



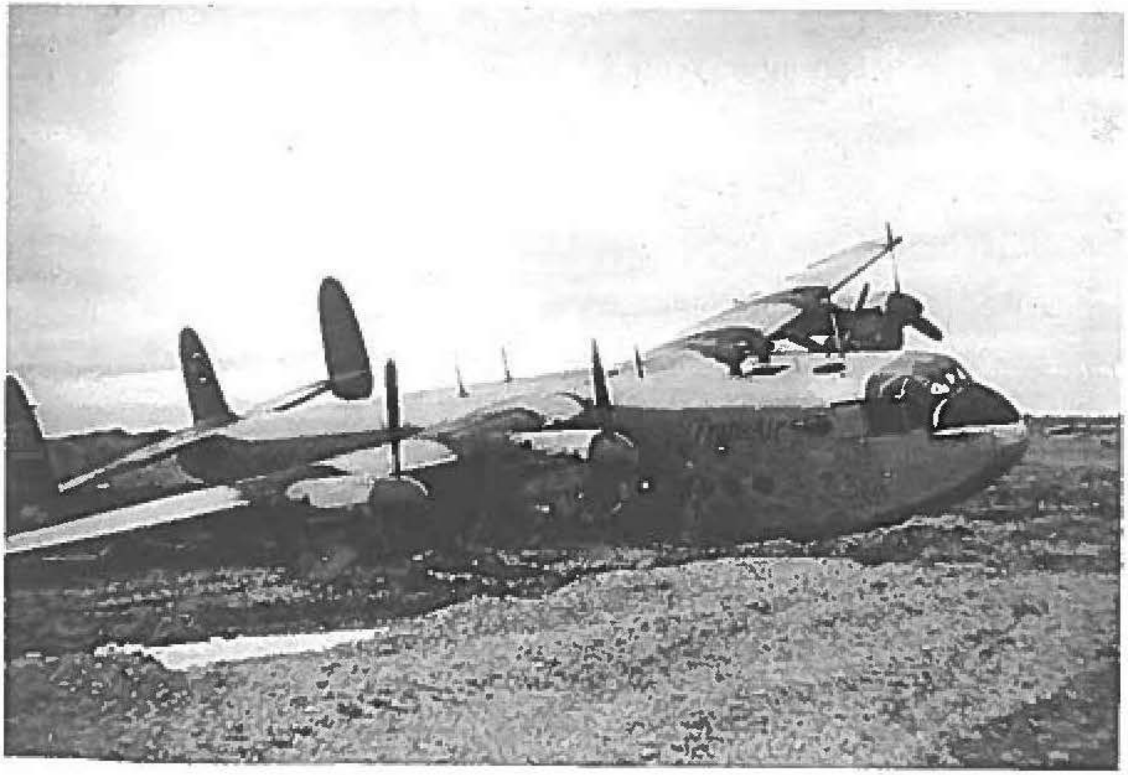
Fox Tower (Hall Beach)

Living quarters at Hall Beach



Ice build-up at Hall Beach

Visiting salesman with Arctic carvings



Final resting place for a York freighter

Stand by Hall Lake - U.S. Airforce to the Rescue

With a project the size of the D.E.W. Line, one can be assured that there will be many noteworthy events. Some will be tragic, some humorous, and some first class blunders. We will put the following in the latter category.

In the very early stages of construction, the first essential was the establishment of a landing strip. This required a bulldozer that, being an extremely heavy piece of equipment, presented a problem in logistics. The combined fleet of aircraft assembled for the construction effort did not include a plane capable of delivering a suitable bulldozer. To the rescue comes the U.S. Air force. They had the planes and they had a plan. The aircraft assigned to the job was a huge cargo craft that featured a large hatch at the rear of the belly opening onto the cargo deck. The plan was to attach a huge parachute to the bulldozer. When over the drop site, open the hatch and eject the parachute and the bulldozer. In theory, the parachute would then open and deposit the bulldozer on or near the airstrip site. I have never been able to establish whether the intention of the plan was to land the bulldozer on the actual airstrip site or on the adjacent lake. In any event, the lake won. Up to a point, all went well. The aircraft arrived over the drop site, the cargo hatch opened, and the parachute and bulldozer shot out of the cargo bay. Now an important function did not happen. The parachute did not open. Whether by accident or design, the drop occurred over the centre of Hall Lake, which, at this time, was covered by about five feet of ice. That did not even slow the descent of the bulldozer. Within seconds of the departure from the aircraft, our bulldozer was resting on the bottom of Hall Lake where, as far as I know, it remains to this day.

As I have previously mentioned, when D.E.W. Line construction first started at Hall Beach, there was no evidence of native habitation in the area. However, while scouting the surrounding terrain, it became evident that at some time in the distant past human beings had left their mark on the landscape. We soon discovered a number of open pits, each containing tons of very large bones. This find left us with many questions and few firm answers. What animal produced those bones? Our best guess was some species of whales. How did a large number of whales get transported about one half mile from the nearest shore? Due to the way the land was built up from the sea, those bone pits were at the seashore when they were deposited. Many more questions come to mind but few positive answers. One fact seems obvious. A large group of people would be required to move the original occupants of those bones. A large group of people would also be required to eat all the meat involved.

Cambridge Bay

Cambridge Bay is located almost at the central point of the D.E.W. Line chain. It is one of the few sites where an airstrip and a settlement existed before the arrival of the D.E.W. Line. The terrain for the most part consists of rolling hills, lakes and rivers.

There is little indication of mineralization but the variety and extent of the vegetation in season is much more abundant than most of my locations. This abundance produced an equal supply of wildlife. The most prominent were birds and lemmings.

My first encounter with birds was when I made the acquaintance of a flock of terns while going for a stroll not far from the base. I was sauntering along taking advantage of an unusually mild midsummer day. Suddenly I realized that I was the centre of attention of a flock of about a dozen very noisy birds. As for many years I had been a third rate bird watcher I recognized them to be terns of some variety. As I kept walking, the birds became more vocal. Almost immediately they went into attack formation and proceeded to dive bomb my head. Number one did not actually make contact but I could distinctly feel the wind from his wings as he pulled up just short of contact. The next in line came a bit closer. He touched my cap and screamed obscenities as he peeled off for another try. The next attacker really meant business and he knocked my cap off and gave my head a thump that hurt. At this point I realized that I was either in, or approaching, a nesting area. I was being invited to leave. I was convinced that this was the reasonable thing to do so I took the hint and left.

Another bird encounter occurred at Cambridge Bay. This time the birds lost. In the vicinity of the airstrip there was what appeared to be a resident flock of large white Arctic owls. They obviously considered the airspace in that vicinity to be their exclusive domain. From time to time they would, as an aircraft was about to land, come diving in from the opposite direction and barely avoid a head on collision. After a number of futile attempts to scare the aircraft away the owls apparently decided to get rough. This time three owls came in abreast. One veered off at the last second but two held their course and met the aircraft head on. Damage to the aircraft was not serious but two owls were a write off. The remaining birds apparently decided it was a lost cause and kept their distance.

As a native of Atlantic Canada I never lived far from a brook where a few trout could be found. I did think of the big lake trout and Arctic Char that I had been told inhabited this northern country. During the early days of my stint at Cambridge Bay I was entertained with many accounts of the huge lake trout in a nearby lake as well as the numerous Arctic Char in a river located only a few miles from the base.

I first checked out the lake but was amazed to find that the lake from which I had been told literally tons of trout had been taken was only about an acre in size and had no visible inlet or outlet. This discovery tended to shake my faith in my source of fishing information but not enough to discourage me from a try at the Arctic Char. A few weeks after my lake trout fiasco I finally found time to visit the river where I had been told the Arctic Char could be found. I approached the river armed with a supply of lures and bait guaranteed to drive any fish crazy. My first reaction was disappointment. I had entertained a vision of a fast flowing river with rapids and pools where fish would lurk just waiting for an attractive bit of lunch to land in their vicinity. What I saw was a narrow river possibly twenty feet wide with slow-moving water and a depth of about two feet. However when I stood on the riverbank and took a closer look I almost fell into the water in sheer astonishment. The water that I was looking at was absolutely the clearest water I had ever seen. Without even a ripple on the surface one could see the bottom with absolute clarity. As a result of this clear water one could see every fish in the river and there were hundreds of them. In my wildest fishing fantasies I had never dreamed of a school of fish like this. Arctic Char were almost blocking out the bottom as far as I could see up and down the river.

I quickly recovered from the shock of what I had seen and armed my fishing line with a lure that I was confident would bring me my share of those delicious fish. My first cast landed almost across the river. I carefully played it within inches of the business end of at least a dozen Char. After a number of casts I decided that the fish did not care for my choice of bait. I changed for something else. Within the next hour I tried every form of fish enticement I had; live bait, dead bait, colourful lures, drab lures. During that time not one char had shown any serious interest in my offering. A few had taken a quick look and turned disdainfully away.

I had in the past returned from a fishing trip empty-handed but this was different. I saw the fish, hundreds of them. I offered them a banquet and yet not one solitary fish did I bring home. I have asked a few expert fishermen to explain my failure. Their answers were not helpful. I was told I was not using the right bait, the fish were not hungry, and the water was so clear that the fish could see me and did not like my looks. There is no doubt an answer but I don't know what it is.

Of all the sites in my experience in the Arctic, Cambridge Bay rates number one in wild life. The bird population was interesting. We will not discuss fish. The animal life was astounding because of one little animal - the lemming. I had heard the stories. The population of Arctic lemming had been known to massively increase to the point where they would congregate in a march to the sea and all jump in to their death.

I was based in Cambridge Bay at a time when they had reached a population that would seem to suggest that they were ready to organize such a march. During the lemming invasion, it was important to add a few items to your daily routine. Never get into your sleeping bag without very thoroughly shaking it out. Use the same precaution with your boots and other items of clothing. Those little creatures seemed to have the ability to get into any building or any container.

Cambridge Bay was one of the few sites with an aircraft hanger. On this particular day it was empty. As I opened the door, turned on the lights, and stepped inside, I stopped in my tracks in amazement. The hanger was literally full of lemmings. I would guess at least a hundred of the chubby little creatures were dashing in every direction looking for a place to hide. Maybe they were using the hanger as a convenient meeting place to organize their next suicide march.

Coral Harbour

Weather forecasts in the Arctic are, at best, undependable largely because weather-reporting stations are few and far between. As a result some very unpleasant weather may well be bearing down on your location and you will not know of it until it actually arrives.

This weather uncertainty plus a massive breakdown of aircraft components provided the setting for an extremely tense day for the crew of our aircraft in the air and the ground crew listening to their progress from our office. The origin of this flight was Coral Harbor on Southampton Island where a reserve supply of fuel was maintained for D.E.W. Line sites and aircraft. Coral Harbor was only used in D.E.W. Line traffic as a refuelling base or an alternative in case of bad weather. On this occasion a DC3 was loaded with drums of fuel oil for a Baffin Island site. On the morning of the flight the weather reports we had received and the weather at Coral Harbor indicated a ceiling of about 2000 feet and cloud cover en route but clear conditions at the destination. There was every reason to believe that this trip would be a routine operation as the crew was fully qualified for instrument flying. The overcast conditions should present no problem.

Loading was completed and the flight took off about 9:00 a.m. Shortly after take off a radio message was received that the flight was on course at 6000 feet on top. The estimated duration of this flight was about three hours. All went well until about two and a half hours into the trip when we received their radio message that their radio receiving equipment had suddenly ceased to function. They still could transmit but could no longer receive on any band including the very vital beacon channels that were their roads in the sky. The captain now advised that he would proceed to his intended destination navigating by the sun only as no compass was useful in this proximity to the magnetic pole. His hope now was that the vicinity of his destination would be sufficiently clear for him to make a landing visually. When we talk about flying in the Baffin Island area we must remember that a large part of this Island is composed of mountainous territory towering to 6000 feet, some of it with permanent ice caps. Having reached and passed the intended destination with no sign of a break in the solid deck of cloud below them the only feasible decision was to turn south still only navigating by the sun and hope for a break in the cloud cover that would permit a landing preferably at Frobisher where repairs could be made to their radio equipment. On the ground we were fully aware of the progress of the flight, as they had been radioing reports from time to time. When they said that they were heading for Frobisher, we were in the position of knowing that Frobisher was socked in completely but that Chimo was reporting clear skies. As the hours passed, we received the message that the flight was now beyond Frobisher. Their plan was to continue heading south with Chimo as their next hope. Grouped around the radio at Coral, each member of the ground crew knew how close this destination would bring the flight to the point of empty fuel tanks. Everyone in this worried group listening to the radio was familiar with this part of the Arctic. We realized that to attempt to descend through the existing cloud cover without knowing their exact location was Russian Roulette with two bullets in the gun.

All afternoon we on the ground, based on the estimates we were receiving from the flight, began to have high hopes that they would arrive at the area of clear skies before their fuel tanks went dry. At last came the message we had been eagerly waiting for. No clouds below and they were over land. Minutes later more good news. They were out in the clear, they were over land, and off to their left was a landing strip. This message did not surprise us. We now knew that they had spotted one of many exploratory mining sites in Northern Quebec.

They carved out their own landing strip that was mostly only suitable for much lighter aircraft. Under present conditions it looked like Mirabel International Airport to our crew. Again our radio came to life. "We are on the ground and the aircraft is all in one piece. Fuel gauges show empty."

When Your Guardian Angel Works Overtime

About midway on my north and south commuting career I had two encounters that convinced me that I had a guardian angel on my side. As my normal work schedule consisted of six seven-day weeks on the job, followed by one week of R and R at home, it all added up to about 25 000 miles of flying each year, most of it in tired old aircraft ready for retirement.

On this occasion I arrived in Mont Joli by train to pick up a flight to Frobisher on the first available. On checking in with the dispatch, I was advised that two aircraft were loading for my destination and I could take my pick.

My first and only question was "What kind of aircraft was involved?" The answer was a York Freighter and a Douglas DC4. At this stage in my flying experience I had established some pretty definite opinions on the virtues and vices of the different planes in D.E.W. Line service and without much hesitation I asked to be booked on the DC4.

Within an hour, the York taxied out, took off and headed north followed very shortly by the DC4 with yours truly on board. This flight was not a sight seeing trip as our take off time was shortly after sunset so that with cloud cover for much of the trip our total visibility was confined to the interior of the aircraft until our arrival at Frobisher.

Immediately on walking into the dispatch office I was greeted with the shocking news that the York on which I had rejected passage had crashed and burned near Chimo.

Miraculously the captain of the York survived the crash and later told me the story of his ordeal. Until about one hour out of Frobisher all had gone well when suddenly a burst of flames appeared from an inboard engine. After quickly using every available method to extinguish the fire to no avail they were now faced with a crucial decision. Keep on flying on the chance that the engine fire would burn itself out or attempt to land in total darkness on a terrain that could offer no chance of a safe landing and only a slim chance of survival.

The crew on the flight consisted of a pilot and two co-pilots, the extra co-pilot being carried on a familiarization flight. Within a matter of minutes, with the fire becoming more intense, the only option left was to try for a landing.

At this point the captain ordered his co-pilots to the rear of the plane as it was generally believed that this location offered the best chance of survival. With the flaming engine now offering only a few more minutes in the air, the pilot now called up every skill in a steep glide with wheels down, flaps down and landing lights on while straining his eyes to pick out a glimpse of the ground on which he hoped to find a haven.

In the few moments after his first glimpse of the up rushing ground the pilot with a fantastic combination of luck and skill managed to line up his craft in an altitude approximating a normal landing. Once on the ground the aircraft was brought to a halt by the stubby spruce trees and rocks that cluttered the emergency runway. In the final seconds of the landing the dying plane provided the miracle that saved the pilot from certain death. As it lurched to a standstill, the plane struck a huge boulder which split the cockpit wide open and catapulted the captain just beyond the inferno that now erupted.

Some hours later, the confused and bruised pilot was picked up by a rescue team with miraculously no broken bones or permanent injuries. Unfortunately, his two companions did not share in his luck as they both died in the conflagration that signalled the end of the York Freighter.

My next flirtation with fate occurred almost a year later. I arrived in Montreal via Air Canada minutes after the Maritime Central DC4 on which I had been scheduled to return to my northern post had taken off for my D.E.W. Line destination. My frustration on missing my flight however was short lived as I soon managed to hitchhike a ride on another northbound flight. Only on my arrival at Frobisher did I hear of the tragic end of the DC4 that I had missed at Montreal. After a routine take off the flight had attained their assigned altitude and were on course over Quebec when the dreaded warning of an engine fire came on. The crew immediately activated all the appropriate fire fighting procedures and briefly appeared to have won the battle when with all the extinguishers empty, the fire burst out with even greater intensity. Piercing together the last transmissions from the doomed craft it was evident that the fire quickly weakened the wing to the point where all lift was lost, putting the aircraft into a flaming spiral to earth. Due to the extended schedule of this flight six crewmembers were on board: two pilots, two co-pilots and two stewardesses.

While tragic death was no stranger to this project, the sudden demise of six more friends came as a tremendous shock, added to which the grim realization that I could have been number seven.

Next Stop, Russia

I think it was a guy by the name of Murphy who came up with a law that goes something like this. "In any situation if something can go wrong it will." This pretty well covers the story of the various legs of a flight I made while returning to my post at Cape Parry from Christmas leave at my home in Moncton, NB. The first leg of my trip was easy. Air Canada to Montreal and then the first D.E.W. Line cargo aircraft to Frobisher. This leg of the trip was 95% freight and 5% passenger. The passenger accommodation consisted of a lone seat surrounded by all the items of cargo necessary to the function of the D.E.W. Line. This is also when the metamorphosis must take place. We go from a 9 to 5 individual and the comforts of a temperate zone home to a cog in a vast machine operating in a bitterly cold and hazardous environment where the only cheerful occupation is counting the days until your next trip south. This, of course, begs the question - Why would anyone take a job that included the hazards and discomforts of this project? The answer is simple. If you take employment with an airline that seeks charter or contract work, you go where your particular talents demand. Period.

For the first half hour after lift-off in Montreal, our flight headed almost due north over open country and scattered towns and villages soon giving way to the vast stretch of lakes and forest of Northern Quebec. After about 2/3 of your journey is behind you, if the visibility permits, you will notice that the terrain below you is no longer predominantly green. It is mostly white and grey, the mixture of rock and snow and ice that will now become your daily fare. You have now passed the tree line and below you is the cheerless surface of the

Ungava Bay followed by Hudson Strait. In the last stage of your flight, you pass over the Meta Incognita Peninsula. It is a desolate area of mountains and glaciers that signals your approach to the airport at Frobisher.

Frobisher Airport is located at the extreme inner end of Frobisher Bay close to the mouth of the Jordan River. As this airport is capable of handling large cargo aircraft, it was one of the main distribution centres for D.E.W. Line flights. Cargo for radar sites with landing strips capable of use by DC3 aircraft only received their supplies via Frobisher where it had been carried from Montreal or Mont. Joli by larger aircraft, mostly Douglas DC4.

Having arrived at Frobisher the next hurdle on my trip was to talk my way onto the first westbound aircraft out of Frobisher. Travel on the D.E.W. Line is not a matter of buying a ticket to a destination. It is much more like hitchhiking. Having been initially accredited as an employee on the line by the USAF, the FBI, and the Prime Contractor, you merely present yourself at the local dispatch office. You then take your place among the cartons of food, the bags of mail, and other assorted items en route to the site of your choice.

After a short night's sleep at the local version of a hotel better described as a flop house, I found myself aboard a DC3 heading for Hall Beach. Again I was the sole passenger tucked in among the assorted cargo. After take off from Frobisher we headed northwest over the low mountains, high hills, and lakes of Central Baffin. After about one hour in the air we crossed the Arctic Circle and said goodbye to the sun for about five weeks. At this season of the year one's knowledge of the terrain below is not obtained by what you can see but by your memory of many flights over this route during the summer months. The last half of this leg of my trip took us over Fox Basin and a number of islands that until quite recently did not appear on any map. We arrived at Hall Beach to a relatively nice day of scattered cloud, light wind, and a temperature of -45 Fahrenheit. The terrain at Hall Beach was no doubt a very welcome sight for the work crew whose duty it was to construct an airstrip here. As far as the eye can see the land is completely flat and composed of crushed limestone shale. A few days work with a bulldozer and you have one of the best airstrips in the Arctic.

On arrival in Hall Beach and checking in with the dispatch office, I encountered my first delay. There were no westbound flights until the next day. However, the mess hall at Hall Beach at the time was one of the best on the line so I resigned myself to waiting. One more day of waiting and I managed to scrounge passage on a westbound flight to Cambridge Bay.

The aircraft was a DC3; the cargo was mostly mail. I had learned long ago that a pile of mailbags can be rearranged to make a fairly comfortable spot for a nap. At this time of year, this leg of my trip could not be devoted to sight seeing. The inside of the aircraft was the extent of my vision. We therefore passed over such landmarks as Melville Peninsula, Committee Bay, King William Island, and Victoria Strait knowing that they were down there but this time, not seen.

I greeted the flight I was on as a bit of good luck. It was scheduled to go to my destination, Cape Parry, with a brief stop at Cambridge Bay. On landing, however, we were greeted with a whole new change of plans, a change typical of what one learns to expect in Arctic travel. Our weather reports and forecast now indicated that a major snowstorm had moved across our route with little prospect of flyable weather for a couple of days.

After enjoying the hospitality of Cambridge Bay for three days, we were finally under way again. Weather reports suggested moderate winds, high overcast, and -42 Fahrenheit.

As our proximity to the magnetic pole rendered a conventional compass useless, the usual procedure was to set your receiver at the frequency of the beacon at your destination station, swing around until you picked up their signal at its strongest point, and follow it home. In this case, home was a distance of about 500 miles.

After about two hours of uneventful flight, our aircraft broke into clear skies. The crew had a chance to check their course by the stars and they quickly made a startling discovery. Our destination was almost due west yet now the North Star was dead ahead. Something was decidedly wrong. The captain immediately changed course to a calculated point where our destination would be and quickly picked up the same beacon identification he had previously followed. We were now in the uncomfortable position of having been flying for two hours and being farther from our destination than when we took off.

Subsequent investigations revealed that there was indeed a source in Russia transmitting a beacon on the same frequency as ours. It was only infrequently heard in our area but due to unusual atmospheric conditions, we had picked up their signal loud and clear. We were on a course for Russia. Back on track to Cape Parry, one had time to assess the grim possibilities of our error in navigation. Had we been faced with the necessity of a forced landing, our position would have been assumed to be somewhere on the direct route between Cambridge Bay and Cape

Parry whereas it would have been far north of that route and far from the area of possible search efforts. Also, had we not discovered our error in direction, we soon would have reached the point of no return and been forced to land in darkness, in about the most hostile terrain imaginable. Not pleasant contemplations on a festive time in our calendar, New Year's Eve.

We eventually arrived at Cape Parry. After a few hours rest, we settled into the daily routine with the next red-letter day the day the sun would rise again.

However, one incident that occurred at this location, I still remember. At Cape Parry, the Hudson Bay store and a small Eskimo village are located about one mile from the end of the local airstrip. Approximately one mile from the opposite end of the strip is another Eskimo settlement. The terrain between those two points is a bleak expanse of drifted snow studded with numerous rocks and boulders. While this is the natural landscape of the area and the type of ground over which the Eskimo make astonishingly long trips by dog team, even the stoic northlander must occasionally wish for a stretch of smooth road as a respite from the effort which he must put forth in driving his sled over the rugged countryside.

On the evening of Jan. 15th one of the local Eskimo was guiding his spirited team of huskies en route home from a visit to the Hudson Bay store when he was overcome by the temptation to take advantage of the mile of smooth runway, which lay directly along his path. It happened that on the same evening Capt. John Smith was returning to Cape Parry on a flight from Cambridge Bay. As the pilot brought his DC3 in over the approach lights of the runway and gently touched his wheels to the ground he was horrified to see in the beam of his landing lights a sight that made his blood run cold. Scarcely more than a hundred yards away and directly in his path was the Eskimo driving his team.

During the next second or two the Eskimo, realizing the danger, scrambled for cover on one side of the runway while his bewildered dogs headed in the other direction. From his position in the cockpit the pilot was not sure whether the Eskimo and his team had escaped or not. It was only after a careful check of the area that they were satisfied that no tragedy had taken place.

Subsequent inquiries at the Eskimo village revealed that the residents in general, and one in particular, were fully convinced that the white man's runway was not a suitable road for their dog teams and that the smoothest road is not necessarily the best.

Cape Parry

Cape Parry is the most westerly main station on the Canadian section of the D.E.W. Line. It is also the most northerly. It is, in fact, within a few miles of being the most northerly point on the Canadian mainland. To get a perspective of the extent of the D.E.W. Line in Canada, Cape Parry in the west is on the same longitude as Vancouver Island while Cape Dyer in the east shares its longitude with Cape Breton Island.

Of my various postings in the Arctic, my sojourn at Cape Parry was the shortest and largely the most uneventful. My total stay was twelve weeks in mid winter. At this season such diversions as I had experienced at other locations, such as exploring the countryside, were far too dangerous and uncomfortable. Therefore, my total memories of Cape Parry consist of bitterly cold and stormy weather and long dark days and nights. One of those cold nights particularly stands out in my memory.

In the Arctic, two enemies must always be remembered as reason for caution. They are cold and wind.

An example of the caution necessary - many sites, where the mess hall was a separate building from the living quarters, installed a rope between those two locations even though the distance rarely exceeded one hundred yards. This precaution because it had been established that it was quite possible for a person to become disoriented and lost even in this short distance in a typical Arctic storm.

My living quarters were located at the radar site at the top of the highest hill. However, my office (for want of a better name) was at the airstrip approximately one mile away. This arrangement required me to travel between those two locations two or three times daily using an Army type truck supplied and serviced by the D.E.W. Line authority.

On this occasion, all flying had been suspended for the day. With winds of forty miles per hour directly across the runway and temperatures -50 degrees Fahrenheit it was definitely not a flying day. This, however, seemed like an opportunity for me to catch up on some paperwork, as ground travel to the airstrip still seemed feasible. The road to the office at the airstrip consisted of a rather crooked downhill stretch for about two thirds of the distance after which it levelled out for the balance of the way. For the first few minutes of my downhill journey, my vehicle worked perfectly and gave no warning of the problem ahead. As I was approaching the level section of the road, the engine started to sputter and miss and in seconds died.

In the next few minutes I tried every trick in the book to restart my engine but soon realized that my gas line was frozen and I had no possible way to thaw it out. As I abandoned efforts to restart my engine I quickly realized that I was now in serious trouble. In my years in the Arctic I had seen -50 cold and 40 mph winds many times but had never attempted to walk farther than from my living quarters to the mess hall during such weather, usually less than 100 yards. In this kind of weather even the natives stayed at home.

I now had to make a critical decision. I could remain in my truck and wait for help to arrive but with the airstrip shut down that might take many hours and be just too late. After weighing my options, I soon decided to try for the airstrip office on foot. Under normal weather conditions this distance would involve a walk of about ten minutes. However, I well knew that this was not normal weather. I also was well aware of the icy gravel road that lay ahead.

As I left my truck behind and started out for my destination, two rules for survival were uppermost in my mind. Keep moving - the temptation to pause for rest must be resisted. If you fall get up immediately but, and this is critical, do not run or exert yourself to the point of breathing heavily. To gasp for breath at the prevailing temperature can fast freeze the lungs in moments.

When leaving the truck behind I took the precaution of leaving the lights on in case I decided that the airstrip office was hopeless and a return to the truck was my best bet. After stumbling, falling, and watching the truck lights fade in the distance, I was encouraged to see the lights of the office become visible between the gusts of drifting snow. For what seemed like an eternity I staggered and stumbled toward that light, trying to remember the rules for avoiding hypothermia, which my Arctic training had taught me could sneak up on one insidiously.

Finally I reached the oh-so-welcome door of the strip office, completing my zigzag course toward that target. The office had been deserted for the duration of the storm but due to the unwritten law of the Arctic, an isolated shelter of this nature should be left with lights and heat on and doors unlocked during this kind of weather. This policy could very well save a life and on this occasion it probably did.

A Tribute to Carl F. Burke, M.B.E.

It is appropriate that we give due credit to the man whose vision and courage built the company that is the background of our story. Carl Burke was born in Charlottetown, PEI on February 20, 1913. He was educated at Spring Park School and Charlottetown Business College. He first went to work as a clerk at Roger's Hardware Store but soon moved on to head the Radio department at Holman's Department Store. At this stage in his life, all Carl's spare time was devoted to flying lessons and accumulating the funds to buy his first plane. By 1936 he had purchased a Gypsey Moth aircraft and qualified for his pilot's license. Only three years later we find him in that elite group of pilots flying planes across the Atlantic in the war effort.

By 1942 Carl had established the company of his visions, "Maritime Central Airways", and began the building of the organization that would carry out the biggest airlift in Canadian History. While this period of rapid expansion was going on, Carl adds to his achievements by performing a feat of spectacular heroism when, with a single engine, two-seater, light plane, he made four consecutive landings on an ice floe in the Gulf of St. Lawrence thereby rescuing four individuals from a downed aircraft. For this feat of courage and skill he was awarded the coveted MBE. To sum up Carl Burke's virtues, he was an outstanding businessman, a courageous pilot and a true Canadian.

EPILOGUE

DEW Plane On Ice Flow For Month

CHURCHHILL, Man., June 13th, 1955, A salvage crew was encamped today on a small ice floe in Hudson Bay, six miles north of here, keeping a $600,000 aircraft above water. The DC-4 plane, owned by United States Overseas Airways, came down on the floe May 10, when it is believed it ran out of gas. It is badly damaged. Company officials hope to tow the floe to Churchill. The crew was taken off safely by an RCAF aircraft earlier.

The plane was reported to be returning to Seven Islands, Que., after deliveries along the DEW radar line being built across northern Canada.

The salvage crew has placed pontoon boats beneath the plane to keep it afloat should the ice pan disintegrate. The outside of the plane has been treated to protect it from salt spray. A boat is patrolling the immediate area twice daily and a helicopter is making frequent checks of the ice condition.

* Taken from Montreal Star, June 13, 1955

Biggest Cargo Lift In Canada's Aviation History

At least two Canadian flying services are believed girding themselves for what may be the biggest air cargo lift in Canadian civil aviation history. Supplying builders of the DEW radar line in Canada's Arctic.

Associated Airways in Edmonton and Maritime Central Airways in Charlottetown each will take delivery from an Ottawa flying company of three huge York transport aircraft within the next few weeks.

It is understood Canadian flying companies with the types of planes required for long hauls into the Arctic will form a pool to carry freight for the United States contractor building the $250,000,000 DEW line.

With addition of the long-range Yorks, capable of carrying eight tons of freight to their feet, Associated and Central will be able to handle almost anything that can be carried by air.

First of the big planes by Avro, arrived here Friday.

Spartan already at work on a $500,000 contract for a three month aerial survey of the Arctic area where the aircraft - warning line will be located, undertook delivery of the planes since this is the off-season for much of it is aerial mapping and survey work.

Western Electric Co., the American management contractor for the DEW line, which the U.S. is paying for, awarded the survey contract to Spartan last week.

Central Airways is expected to use its Yorks to carry freight for the Foundation Company's end of the job, while Associated flies supplies into the Arctic with its Yorks for the western half, to be built by the

Northern Construction Co., Vancouver.

The DEW line is expected to be completed in about two years. Canada is footing the estimated $150,000,000 bill for the Mid-Canada line, which will be built at about the 55th parallel around the same time as the DEW chain.

Both the DEW and Mid-Canada lines will be co-ordinated with the Pinetree Network, already in operation near the Canada-U.S. border.

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* Taken from Montreal Star, 1952

The DEW Line Clean-up Project

One of the most challenging environmental restoration projects ever undertaken in Canada is now underway in the Arctic. The DEW line clean-up Project, initiated by the Federal Government in 1989, involves the cleanup of radar sites scattered in remote locations, and stretching across 5000 km of the Canadian Arctic. As scientific advisor to the Government, ESG has played a leading role in developing a cleanup strategy and environmental standards for the sites, and is responsible for identifying the requirements for remediation and confirmatory testing as the cleanup progresses. ESG has also provided environmental advice during negotiations with Inuit groups, and with the US Government.

The DEW line cleanup strategy was developed during a series of environmental investigations conducted between 1989 and 1994. The studies revealed significant physical and chemical impact on the Arctic environment, and pointed to a need for the creation of cleanup standards suitably stringent for the fragile Arctic ecosystem. The strategy provides a protocol for assessing the sites, for applying a set of environmental criteria, and for implementing the cleanup. The protocol was initially reviewed by various government regulatory agencies in 1991, and has since undergone numerous revisions reflecting public input and Aboriginal Cooperation Agreements.

Cleanup operations at the DEW Line sites began in 1996; to date, four of the 21 sites have been cleaned up and work is underway at seven others. The $320 million project is scheduled to be completed by 2008. After completion, a monitoring program will be put in place to ensure continued environmental protection.

* Taken from the Canadian Department of Natural Defense Website, 2004

ABOUT THE AUTHOR

J. Arthur Lewis was born in West Royalty, Charlottetown, P.E.I. on Feb. 9, 1907. After completing his education, he built and managed a garage and gas station at "Queen's Arms", Charlottetown. In the year 1931, he set up and operated the first bus system on Prince Edward Island. This business he eventually sold to SMT. For five years Mr. Lewis was District Manager for a major oil company on P.E.I. In the early 40's he began a fish cannery in Charlottetown, Lewis Packing Co., and continued in the business until he joined Maritime Central Airways in 1950. This led to his position as dispatcher on the DEW line from 1951 to 1957. It is from these years in the north that Mr. Lewis recounts his true experiences.

Upon his retirement, Mr. Lewis began a new business, East Coast Printing, in Petitcodiac, N.B. Here he produced dipsticks for oil companies throughout Canada. While living in Petitcodiac Arthur Lewis was a member of town council and acted as deputy mayor. Mr. Lewis was a most inventive man with a keen mind. He was honest, kind, sincere and above all caring of his family. His wife, Marjorie Holman, also of Charlottetown, was a true partner in his life for 63 years. She died less than a year before him in 1996. It was their hope to publish and share Arthur's adventures on the DEW line with all who would be interested.

J. Arthur Lewis